# Industrial Development and Social Management in the Era of Big Data

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Abstract: Nowadays, various science and technology are more and more developed. With the widespread popularization of the Internet, various information technologies have also been greatly developed and widely used. We have entered an era of information data explosion. In order to explore the research issues in the field of industrial development and SCLM (Social management) in the big data age, we specially selected a company H which specializes in the investigation and research in these two aspects as the object of this experiment. Then, we investigated the work efficiency of the company and the employees' opinions on BDT (big data technology). Then, the experimental study shows that the company is far less efficient than the use of BDT before using BDT for investigation and research. For example, before BDT is applied, its working efficiency is 77% and 96% after BDT is applied.

Keywords: Big Data Age, Industrial Development, Social Management, Information Technology

#### 1. Introduction

Now, due to the emergence of various emerging network technologies, we have more and more means to obtain information in our life and work, and various information technologies have been greatly improved and developed. With the development of the times, data types have become rich and diverse [1-2]. BDT can help China's industrial reform and upgrading, promote economic development and transformation, and help China's social economy develop better. At present, China should vigorously promote the sustainable and healthy development of BDT, and take the future development of BDT as a major development strategy. At present, China's existing big data talents and talent training mechanism can not meet the requirements of the current big data industry, so we urgently need to innovate and reform the existing talent training mode, so as to build a talent training mechanism that meets the requirements of the times. Under the background of the development of big data industry, this paper analyzes the problems related to SCLM in the era of information index explosion [3-4].

BDT has important strategic significance for a large part of organizations. Big data is an innovative collection, but this collection is also destructive. A series of innovations and reforms can bring changes to society and traditional business models, and create an emerging social industry model. We should make rational use of BDT, so as to create a new environment for our life Create more value and wealth. But as we often say, everything has two sides, both advantages and disadvantages. Therefore, when we study a problem, we should consider it from many aspects. We need to integrate multiple disciplines, and then learn from each other to make up for the shortcomings, so that the traditional SCLM can better adapt to the changes of the new situation. As the Internet technology is now very developed, many emerging technologies have emerged, and BDT is one of them [5-6]. To a certain extent, BDT has brought great development to social industrial informatization, but many related social problems have emerged. Therefore, it is necessary for us to attach great importance to this phenomenon, and then discuss it [7-8].

Our life has changed dramatically since we stepped into the era of big data. Now the relevant institutions in the study of SCLM problems, basically use the BDT, big data to people's life not only provides a lot of convenience, but also provides a new way for people to think and solve problems. In the new era, we should make good use of BDT, make it serve us better, help us better solve the problems in SCLM, and provide people with better and better social services and welfare[9-10].

#### 2. Method

## 2.1. Big Data Era

BDT is a new information technology that can improve the work efficiency based on its own technology development logic and the development of the original information technology. Full time information sensor acquisition terminal collects massive data for us. Through the continuous progress of cloud computing, computer technology provides us with powerful computing power. Around the behavior of individuals and organizations, we build a digital world parallel to the physical world. Although big data is growing with the increasing popularity and maturity of information and communication technology, it is still a major challenge. Its impact on social and economic life is not limited to the technical level. In essence, it provides us with a new world view, that is, decision-making will be more and more based on data analysis, rather than relying on experience and intuition as in the past. The great value of BDT is gradually recognized by human beings. Through the innovation and development of technology, as well as the comprehensive perception, collection, analysis and transmission of data, it provides a new way of decision-making for people. Decision makers make a decision more based on facts and data. This predictable way of thinking will bring about some great changes in the society that is used to relying on "almost" operation.

#### 2.2. Industrial Development

Industrial development refers to the production, growth and development process of an industry, including the development process of a single industry and the development process of the whole economy. The development process includes not only the quantitative change of enterprises, products or services, but also the qualitative change of industrial structure and the change of the whole production mode, as well as the change of exchange and positioning of industrial market, especially the development direction with structural adjustment and industrial structure optimization as the core. Industrial development is a leap in quantity and quality. Generally speaking, industrial growth does not refer to one aspect of development, which also covers absolute growth and relative growth.

At present, the level of labor productivity of our country adapts to the current industrial situation and has a strong absorptive capacity in the face of industrialized society. In the modern market economy, the industrial division of labor is deepening and refining. In the industrial production, the level of productivity is changing with the development of the times, and this change is developing in a good direction. The level of productivity is closely linked with industrial development, which has become a key factor and covers the power of industrial development. The power development of industry is first reflected in the innovation and application of science and technology, and then mainly transformed into market supply and demand, and the development of industry is affected by the changes of market supply and demand. Therefore, it is a gradual and interactive process. There are three main factors affecting the industrial development cycle, which are innovation, demand and supply, and psychology.

# 2.3. Social Management

SCLM is the external name of public administration. First of all, it is a process in which the government and social organizations organize, coordinate, manage, regulate, supervise and correct the social failures of various components of the social system. Only by establishing a complete set of facilities in all fields of social life and all aspects of social development can we coordinate the normal operation of the social system. SCLM is a special organization for comprehensive management of social, political and cultural affairs, which is composed of social members. Moreover, SCLM is authorized by the authority department to manage some public affairs, which do not belong to the economic, political and cultural departments. SCLM can coordinate social relations, and then effectively regulate some social behaviors, and then solve social problems. It can also help solve social contradictions, so as to promote a more harmonious society, and then eliminate some social risks, so as to promote a more fair and just society. In the final analysis, SCLM is the management and service of the people, including the management and service of the vital interests of the masses. We should take the satisfaction of the masses as the measure of strengthening and innovating SCLM, always pay attention to the interests and expectations of the masses, and strive to solve the problems of the vital interests of the masses. So as to bring a better happy life to the people.

# 2.4. Algorithm Formula Involved in the Experiment

It is inevitable for us to calculate some relevant experimental data indexes in experiments. At the same time, in order to keep the experimental results objective and accurate to a certain extent and make the experimental data more convincing, we often use some relevant calculation formulas in probability theory:

$$E(X) = \int_{-\infty}^{+\infty} x f(x) dx \tag{1}$$

$$E((X - E(X))^{2}) = D(X)$$
 (2)

$$F(x) = \int_{-\infty}^{x} f(x)dx$$
 (3)

# 3. Experiment

#### 3.1. Research Objects

We selected a company H that specializes in research on industrial development and social management as the experimental research object, and explored their research results on social industrial development and social management in the context of big data technology, and whether the research efficiency is compared with the previous improvement, at the same time, we conducted survey interviews on the opinions of the employees of this company, which also served as a basis for the experimental investigation.

## 3.2. Experimental Research Steps

We conducted a six-month survey on the company's work efficiency from January to June of the same year. In the first three months, the company adopted the original survey method when conducting research on social industrial development and SCLM issues, and in the last three months, the company adopted the BDT method. In addition, we also randomly selected 300 employees of the company to conduct a random survey and asked them about their opinions on BDT, so as to get some experimental basis from their opinions.

# 4. Discussion

# 4.1. H Company's Work Efficiency Changes in the Past Six Months

We divided the experimental results into six groups by month. The detailed results of the survey are shown in the following chart:

Table 1: H Company's work efficiency changes in the past six months

	H Company
Group one	76%
Group two	71%
Group three	77%
Group four	83%
Group five	90%
Group six	96%

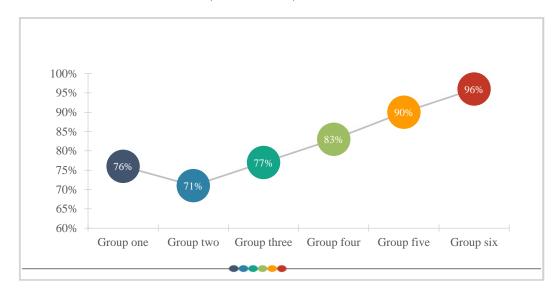


Figure 1: H Company's work efficiency changes in the past six months

Looking at the chart above, we can see the change of work efficiency of H company in the past six months. First, we can see that the efficiency of the first three months without BDT is 76%, 71% and 77%, which are basically within 70% - 80% of the total efficiency. In April, may, June, H company used BDT to conduct survey data. During this period, the company's work efficiency was 83%, 90% and 96%, respectively. Therefore, we can know that the work efficiency of these three months is relatively high compared with the previous three months. The comparison of work efficiency in the six months can also show that BDT has indeed improved the work efficiency of the company. Moreover, we can see from Figure 1 that the work efficiency of the company is not only low but also volatile in the first three months. The work efficiency of the last three months has been steadily rising from 83% and the work efficiency is also high.

# 4.2. H Employee Opinion Survey

Table 2: A survey of employees' opinions in H Company

	H Company
Very elated	32%
elated	41%
general	16%
disgusting	11%

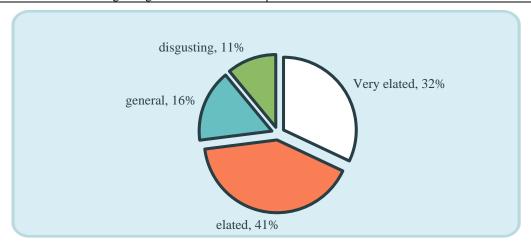


Figure 2: A survey of employees' opinions in H Company

From the data results in Table 2 and Figure 2, we can see that the employees of H company are quite satisfied with BDT on the whole. Among the 300 employees surveyed, 32% of them are very fond of the technology, 41% of them are fond of the technology, 16% of them think the technology is

average, and 11% of them are not very satisfied with it. But on the whole, we can know that 73% of the employees participating in the survey are satisfied with the BDT, which can explain to a certain extent that the BDT has played a positive role in obtaining relevant information and assisting relevant staff in the investigation and research of things.

#### 5. Conclusions

In fact, SCLM and information services are closely linked, and the two have something in common at the social level. With the rapid development of information technology, some social group events are often spread rapidly by Internet information technology. These mass incidents often belong to the field of SCLM. The rapid development of big data industry has brought great changes to the work of SCLM. At present, many SCLM staff have to use BDT when they study and solve social problems. In fact, one of the main tasks of SCLM is to collect information. In fact, this field also belongs to an information service industry, and the emergence of BDT provides a new development direction for the development of this industry. This experimental study also shows that BDT can improve the work efficiency of SCLM, bring new changes to the working mode of SCLM, and ensure the quality of information obtained. Therefore, the development of big data industry has a positive impact on SCLM to a certain extent.

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